

Claim Amendments

1. (Currently amended) A medical system, comprising:
a lead body having a proximal end;
a plurality of electrodes distributed circumferentially on an exterior surface of the lead body to form a circumferential array of adjacent electrodes;
an assembly of elongated insulated conductors extending through the lead body;
a lead connector at the proximal end of the lead body including an array of lead connector contacts along the lead body, each lead connector contact being joined to a corresponding electrode of the circumferential array via the assembly of elongated insulated conductors;

a pulse generator including a header with a connector bore, the connector bore having a first bore contact positioned along the length of the bore and being adapted to receive the lead connector of the lead body at a plurality of positions along the length of the connector bore such that at each position of the lead connector within the connector bore a first one of the lead connector contacts is electrically connected to the pulse generator by the first bore contact and a second one of the lead connector contacts that is inside the bore connector and the corresponding electrode joined to the second one of the lead connector contacts is are electrically disconnected from the pulse generator;
and

means for reversibly locking the lead connector in place within the connector bore[[,]]

~~wherein at least one electrode of the plurality of electrodes being selected in response to one of lowest attainable threshold and absence of phrenic nerve stimulation.~~

2. (Original) The medical system of claim 1, wherein the connector bore has a second bore contact and at each position of the lead connector within the connector bore an electrical connection is made between the second bore contact and a third one of the lead connector contacts.

3. (Currently amended) The medical system of claim 4~~2~~, wherein one of the ~~lead~~ connector bore contacts is longer than the other contacts.

4. (Original) The medical system of claim 1, further comprising an insertion tool and wherein the connector bore further includes a proximal opening and a distal opening; the insertion tool adapted to be inserted into the proximal opening of the bore and to pull the lead connector through the distal opening of the bore and into the multiple positions.

5. (Original) The medical system of claim 1, wherein the means for reversibly locking the lead connector within the bore at the multiple positions along the bore includes a deflectable member projecting into the bore.

6. (Original) The medical system of claim 5, wherein:
each connector contact in the array of connector contacts includes a surface depression; and
the deflectable member is adapted to rest within the surface depression of each connector contact at each of the multiple positions.

7. (Currently amended) The medical system of claim 5, wherein:
a linear array of lead connector contacts further includes a set of spacers, each spacer of the set of spacers separating each connector contact in the array of connector contacts and each spacer including a surface depression; and
the deflectable member projects from the connector bore and is adapted to rest within the surface depression of each spacer at each of the multiple positions.

8. (Currently amended) The medical system of claim 5, wherein:
the lead connector further includes an array of surface depressions positioned apart from the array of lead connector contacts; and

the deflectable member projects from the connector bore and is adapted to rest within each surface depression of the array of surface depressions at each of the multiple positions.

9. (Original) The medical system of claim 1, wherein the means for reversibly locking the lead connector within the bore at the multiple positions along the bore includes an actuated member.

10. – 20. (Cancelled)

21. (Withdrawn) A medical system, comprising:
a lead body having a distal end and a proximal end;
electrodes disposed along a distal length of the lead body, the distal length adjacent to the distal end;
connector contacts disposed along a proximal length of the lead body, the proximal length adjacent to the proximal end, one of the connector contacts disposed closer to the proximal end of the lead body than the other connector contacts, each of the connector contacts electrically connected to a corresponding one of the electrodes;
a pulse generator having a connector bore that includes a first bore contact, the proximal end and the proximal length of the lead body adapted to be inserted within the connector bore such that the one of the connector contacts is inserted into the connector bore by a first amount in a first configuration and by a second amount that is greater than the first amount in a second configuration, the connector bore enclosing at least two connector contacts in both the first and the second configurations, the first configuration characterized in that the first bore contact is electrically connected to one of the at least two connector contacts, the second configuration characterized in that the first bore contact is electrically connected to another one of the at least two connector contacts; and
a lock capable of holding the proximal end of the lead body in the first configuration and the second configuration.

22. (Withdrawn) The medical system of claim 21, the first configuration further characterized in that the first bore contact abuts the one of the at least two connector contacts, the second configuration further characterized in that the first bore contact abuts the another one of the at least two connector contacts.

23. (Withdrawn) The medical system of claim 21, wherein the connector bore and the proximal end of the lead body are configured such that the proximal end of the lead body can only be inserted within the connector bore from one direction.

24. (Withdrawn) The medical system of claim 23, the connector bore comprising a second bore contact, the second configuration characterized in that the second bore contact is electrically connected to the one of the at least two connector contacts.

25. (Withdrawn) The medical system of claim 24, the connector contacts comprising at least three connector contacts that are enclosed by the connector bore in the first and the second configurations, wherein the first and second bore contacts are electrically connected to adjacent ones of the at least three connector contacts in the first configuration and in the second configuration.

26. (Currently amended) A medical system comprising:
a lead body;
a plurality of electrodes distributed circumferentially on an exterior surface of the lead body;
an assembly of elongated insulated conductors extending through the lead body;
a lead connector at a proximal end of the lead body including an array of lead connector contacts along the lead body, each lead connector contact being joined to a ~~corresponding~~ a unique one of the plurality of electrodes; and
a pulse generator including a header with a connector bore, the connector bore having ~~at least one~~ a first bore contact and a second bore contact positioned along a

length of the connector bore and being adapted to receive the lead connector at a plurality of positions along the length of the connector bore,

the first bore contact having a first length and the second bore contact having a second length less than the first length such that the first bore contact electrically connects to a first one of the lead connector contacts when the lead connector is positioned in a first position and in a second position,

the second bore contact electrically connects to a second one of the lead connector contacts when the lead connector is positioned in the first position and a third one of the lead connector contacts being electrically disconnected from the pulse generator,

the second bore contact electrically connects to the third one of the lead connector contacts when the lead connector is position in the second position and the second one of the lead connector contacts being electrically disconnected from the pulse generator

~~wherein at least one electrode of the plurality of electrodes being selected in response to one of lowest attainable threshold and absence of phrenic nerve stimulation.~~

Please ADD the following NEW claims:

27. (New) The medical system of claim 26, wherein:

the connector bore comprises a deflatable member projecting into the bore, the lead connector includes a set of spacers separating each lead connector contact in the array of lead connector contacts, each spacer including a surface depression; and

the deflatable member adapted to rest within the surface depression of one of the spacers when the lead connector is positioned in each of the plurality of positions along the length of the connector bore.

28. (New) The medical system of claim 26, wherein:

the lead connector comprises an array of surface depressions positioned apart from the array of lead connector contacts; and

the connector bore comprises a deflectable member projecting into the bore and adapted to rest within one of the surface depressions when the lead connector is positioned in each of the plurality of positions along the length of the connector bore.